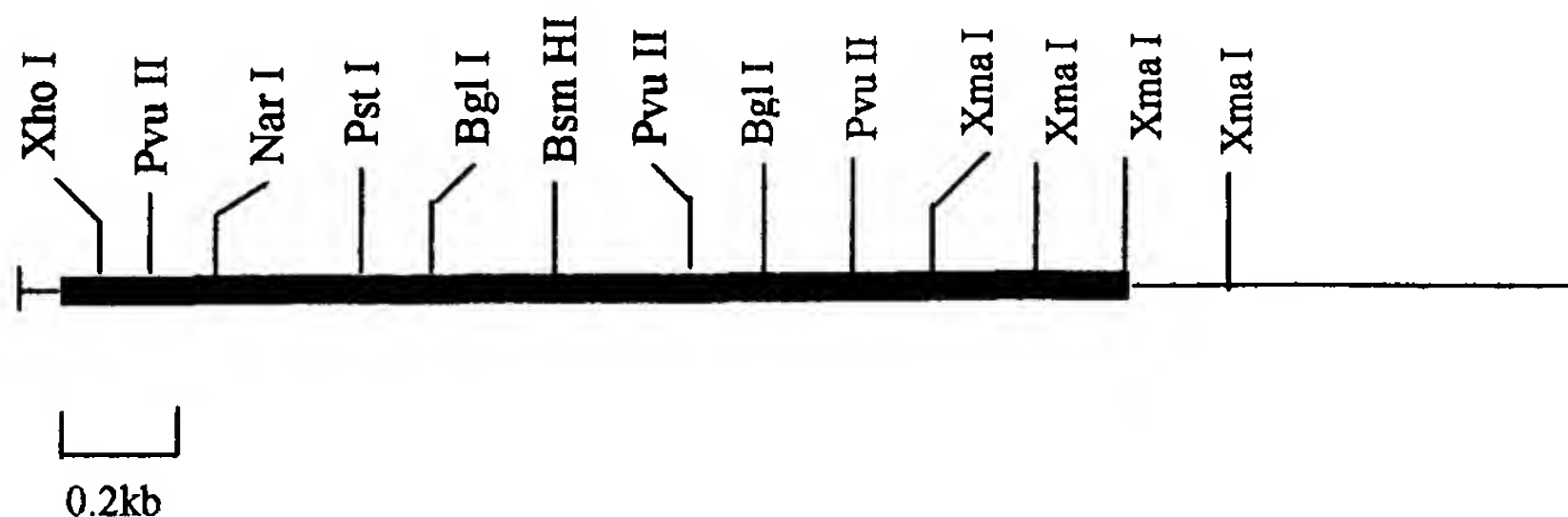
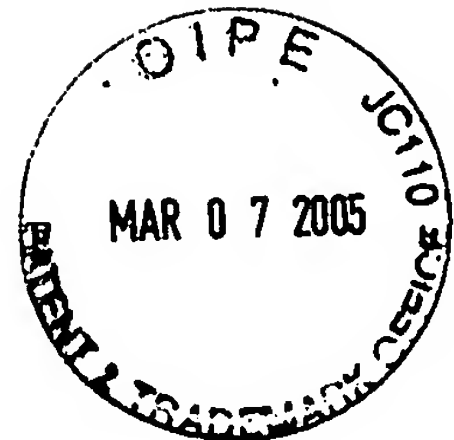


Fig. 1A



-12 39  
GG GCG GAC TCT AAA ATG AAT CCC GAT CTG GAC ACC GGC CAC AAC ACA TCA GCA  
M N P D L D T G H N T S A  
93  
CCT GCC CAA TGG GGA GAG TTG AAA GAT GCC AAC TTC ACT GGC CCC AAC CAG ACC  
P A Q W G E L K D A N F T G P N Q T  
147  
TCG AGC AAC TCC ACA CTG CCC CAG CTG GAC GTT ACC AGG GCC ATC TCT GTG GGC  
S S N S T L P Q L D V T R A I S V G  
201  
CTG GTG CTG GGC GCC TTC ATC CTC TTT GCC ATT GTG GGC AAC ATC CTG GTC ATC  
L V L G A F I L F A I V G N I L V I  
255  
CTG TCA GTG GCC TGC AAT CGG CAC CTG CGG ACG CCC ACC AAC TAC TTC ATT GTC  
L S V A C N R H L R T P T N Y F I V  
309  
AAC CTG GCC ATT GCT GAC CTG CTG TTG AGT TTC ACA GTC CTG CCC TTC TCC GCT  
N L A I A D L L L S F T V L P F S A  
363  
ACC CTA GAA GTG CTT GGC TAC TGG GTT CTG GGG CGC ATC TTC TGT GAC ATC TGG  
T L E V L G Y W V L G R I F C D I W  
417  
GCA GCG GTG GAC GTC CTG TGC TGT ACG GCC TCC ATC CTG AGC CTA TGT GCC ATC  
A A V D V L C C T A S I L S L C A I  
471  
TCC ATT GAT CGC TAC ATT GGG GTG CGC TAC TCT CTG CAG TAC CCC ACT CTG GTC  
S I D R Y I G V R Y S L Q Y P T L V  
525  
ACC CGC AGG AAG GCC ATC TTG GCA CTC CTC AGT GTG TGG GTT TTG TCC ACG GTC  
T R R K A I L A L L S V W V L S T V  
579  
ATC TCC ATC GGG CCT CTC CTT GGA TGG AAA GAA CCA GCG CCC AAC GAC GAC AAG  
I S I G P L L G W K E P A P N D D K  
633  
GAA TGC GGA GTC ACC GAA GAA CCC TTC TAT GCC CTC TTT TCC TCC CTG GGC TCC  
E C G V T E E P F Y A L F S S L G S  
687  
TTC TAC ATC CCA CTC GCG GTC ATT CTG GTC ATG TAC TGC CGG GTC TAC ATC GTG  
F Y I P L A V I L V M Y C R V Y I V  
741  
GCC AAG AGG ACC ACC AAG AAC CTG GAG GCT GGA GTC ATG AAG GAG ATG TCC AAC  
A K R T T K N L E A G V M K E M S N  
795

Attorney Docket Number: 26473/04200



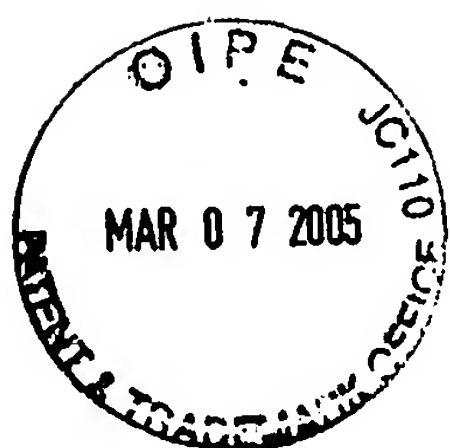
Title: **MODEL SYSTEMS FOR NEURODEGENERATIVE AND CARDIOVASCULAR DISORDERS**

Inventors Name: Perez, et al.; Application Serial No.: 10/052,589

Attorney Docket Number: 26473/04200

Fig. 1C

AAC GTG TGG GCT GCA TGG ATG TGT GTT GGG GGC CTG CCC ACT TGC GCG TGC TGG	1983
GGC AGA GCG AGT GTG TGC CCT GGC AAT GTC AGG TTT GTT GTT TGT CTC TTG ACT	2037
TGT ACC TCT CAA GCC CCT CCT TGT TCT CTG GTC AAT GCT GGC ATT TTG ATG GGG	2091
TTG GAA ACC AAG TCA GAT ATT AAA AAT CAT TTC TCG TGA AAA AAA AAA AAA	



Title: **MODEL SYSTEMS FOR NEURODEGENERATIVE AND CARDIOVASCULAR DISORDERS**

Inventors Name: Perez, et al.; Application Serial No.: 10/052,589

Attorney Docket Number: 26473/04200

Fig. 2A

	3		9		15		21		27		33		39		45
1	TCG	ACT	GCC	CAG	TGC	CCT	TTG	CCT	CTG	CAC	CAT	CTC	CAT	GAT	CAA
	AGC	TGA	CGG	GTC	ACG	GGA	AAC	GGA	GAC	GTG	GTA	GAG	GTA	CTA	GTT
46	TGA	GCT	AAG	GTA	CCA	GGA	GCT	CCA	ACA	GGT	TCA	CAC	TAC	CAC	AAA
	ACT	CGA	TTC	CAT	GGT	CCT	CGA	GGT	TGT	CCA	AGT	GTG	ATG	GTG	TTT
91	CCT	CAA	AAA	TAG	GCA	TCT	CTT	ATG	TTT	AAA	TCT	CTA	AAG	GCA	GCT
	GGA	GTT	TTT	ATC	CGT	AGA	GAA	TAC	AAA	TTT	AGA	GAT	TTC	CGT	CGA
136	TAG	GTA	AGA	TAG	TTG	AAA	TGA	GGG	CAG	GGA	CTG	TTT	TCA	AAG	CTA
	ATC	CAT	TCT	ATC	AAC	TTT	ACT	CCC	GTC	CCT	GAC	AAA	AGT	TCC	GAT
181	TCT	GAA	TCA	TTG	TTT	GTT	TGT	TTG	TTT	GTT	TGT	TAT	CTC	AGA	GAA
	AGA	CTT	AGT	AAC	AAA	CAA	ACA	AAC	AAA	CAA	ACA	ATA	GAG	TCT	CTT
226	ACT	CCT	TAG	AAT	TGT	ATA	TTT	TGT	GCA	ACT	GGA	GAG	CTT	GTG	CCA
	TGA	GGA	ATC	TTA	ACA	TAT	AAA	ACA	CGT	TGA	CCT	CTC	GAA	CAC	GGT
271	TTT	TTA	ATA	GGA	GAT	TAA	GGA	CCT	TAA	ACG	TAT	AGT	GGG	TGA	TAC
	AAA	AAT	TAT	CCT	CTA	ATT	CCT	GGA	ATT	TGC	ATA	TCA	CCC	ACT	ATG
316	ATG	CTT	GTA	ACA	ACA	ACA	CTA	AGA	GGC	TGG	GAA	AAG	AGG	AAG	ATT
	TAC	GAA	CAT	TGT	TGT	TGT	GAT	TCT	CCG	ACC	CTT	TTC	TCC	TTC	TAA
361	ATC	ATG	ATT	TTG	GGG	CCA	GCC	TGG	GCT	AAT	AAT	AAG	TTC	TAG	GCC
	TAG	TAC	TAA	AAC	CCC	GGT	CGG	ACC	CGA	TTA	TTA	TTC	AAG	ATC	CGG
406	AGC	CTA	GGC	CCA	AGT	AAG	ACC	ATC	TCT	CAA	ACA	AGC	AAT	CAA	AGG
	TCG	GAT	CCG	GGT	TCA	TTC	TGG	TAG	AGA	GTT	TGT	TCG	TTA	GTT	TCC
451	CTG	GAG	AGT	TGT	CTC	AGC	AGA	TAA	GGG	CAT	TTG	GTG	CTC	TTG	CAG
	GAC	CTC	TCA	ACA	GAG	TCG	TCT	ATT	CCC	GTA	AAC	CAC	GAG	AAC	GTC
496	AGG	ACT	CGG	GTC	CAA	TTC	CCA	CCA	CCC	AAA	TGG	TGG	CTC	ACA	ACC
	TCC	TGA	GCC	CAG	GTT	AAG	GGT	GGT	GGG	TTT	ACC	ACC	GAG	TGT	TGG
541	ATC	CCA	ACT	TCA	GCT	TCA	GAG	GAC	CCC	ATG	CCC	ATC	TGT	CAA	CTT
	TAG	GGT	TGA	AGT	CGA	AGT	CTC	CTG	GGG	TAC	GGG	TAG	ACA	GTT	GAA
586	TCA	CAG	GCA	GCA	AAG	CAG	GCA	ATG	AAT	GTA	ATA	CTC	ACA	CGC	AAA
	AGT	GTC	CGT	CGT	TTC	GTC	CGT	TAC	TTA	CAT	TAT	GAG	TGT	GCG	TTT
631	AAA	AAA	AAA	AAA	AAA	AAA	AAG	ACA	GTA	AAT	TAA	AAG	AAA	CAA	ATA
	TTT	TTT	TTT	TTT	TTT	TTT	TTC	TGT	CAT	TTA	ATT	TTC	TTT	GTT	TAT
676	AAC	AAA	AAA	CGT	AAT	CTT	CTC	CAA	AAA	GTA	CAA	GCA	AAA	AGA	CTT
	TTG	TTT	TTT	GCA	TTA	GAA	GAG	GTT	TTT	CAT	GTT	CGT	TTT	TCT	GAA

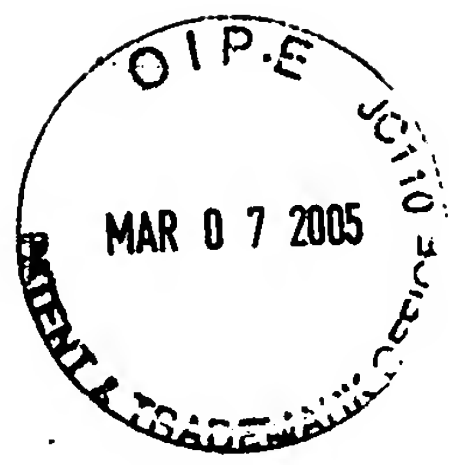


Fig. 2B

721 CAA AAG CCC AAC TTT AGG CTG AAG AAC TTG CAC AGG AAC CGC CTT  
GTT TTC GGG TTG AAA TCC GAC TTC TTG AAC GTG TCC TTG GCG GAA

766 GCA TGG CCC CTG CTT CCT TGC CCC TTA ATC AAA ATA CAG CGA CTA  
CGT ACC GGG GAC GAA GGA ACG GGG AAT TAG TTT TAT GTC GCT GAT

811 TCA AAA GCA GAA ATT AGA AGC CTG GGC CAT GGC TTG TGG ACT GGA  
AGT TTT CGT CTT TAA TCT TCG GAC CCG GTA CCG AAC ACC TGA CCT

856 AGA AAT GGG TAT CAG GTG TCT CCT TGC AAT TCA GCA GCC ACT GCC  
TCT TTA CCC ATA GTC CAC AGA GGA ACG TTA AGT CGT CGG TGA CGG

901 CTG TCC CCT GCC TCA TGT CAC TAG CAT ATG ACT AAC TCT CTG ATC  
GAC AGG GGA CGG AGT ACA GTG ATC GTA TAC TGA TTG AGA GAC TAG

946 TAC TGT TTT CTC GTG TGT CCA CAG AGA GCA GTG ATG CCT CTC TCT  
ATG ACA AAA GAG CAC ACA GGT GTC TCT CGT CAC TAC GGA GAG AGA

991 CAA AGA CTT GTT AAA GAA AAA TAA AAG AAA ATA AGT AAG CTG GGT  
GTT TCT GAA CAA TTT CTT TTT ATT TTC TTT TAT TCA TTC GAC CCA

1036 GTG GTG TCT TAT GCT TGT AAT CCA AGC ACT GGG GAG GTG GGG GCC  
CAC CAC AGA ATA CGA ACA TTA GGT TCG TGA CCC CTC CAC CCC CGG

1081 AAC GGA TTT TGG GGT TTG GGA CAA TAT TGG TCT GCA TAG TGA GCT  
TTG CCT AAA ACC CCA AAC CCT GTT ATA ACC AGA CGT ATC ACT CGA

1126 CAA GAC CAG TGT GAG CTA CAC AGC AAG AAA AGG GAA GAG AAG AGA  
GTT CTG GTC ACA CTC GAT GTG TCG TTC TTT TCC CTT CTC TTC TCT

1171 AGA GAA GAG AAG AGA AGA GAG GAG AGG AGA GGA GAG GAG AGG AGA  
TCT CTT CTC TTC TCT TCT CTC CTC TCC TCT CCT CTC CTC TCC TCT

1216 GAG AGA GGA GAG GAG AGG AGA GGA GAG GAG AGG AGG GAG AGG AGA  
CTC TCT CCT CTC CTC TCC TCT CCT CTC CTC TCC TCC CTC TCC TCT

1261 GGA GGG GAG AGA AAT AAG TAA ATG TTT GAT GAA CAG TAG GAG CTC  
CCT CCC CTC TCT TTA TTC ATT TAC AAA CTA CTT GTC ATC CTC GAG

1306 AGC AAA TGT GGG TTC CTT CCC AGT AGC ACT AAC TTG AGC CCC AAA  
TCG TTT ACA CCC AAG GAA GGG TCA TCG TGA TTG AAC TCG GGG TTT

1351 ATG AGC CAT TTA AAA AAA AAG CCC AAG TTA TAA CAT TTA CTC TAT  
TAC TCG GTA AAT TTT TTT TTC GGG TTC AAT ATT GTA AAT GAG ATA

1396 CCC CTA TTT TGC TCC TAT AGA AAC GGT GAC TCT TCT ATG GCT CAG  
GGG GAT AAA ACG AGG ATA TCT TTG CCA CTG AGA AGA TAC CGA GTC

1441 TAC TCA GCA CTA GAA TAA GGA AAC CCA GTA ATG ACA TTC AAC TCC  
ATG AGT CGT GAT CTT ATT CCT TTG GGT CAT TAC TGT AAG TTG AGG

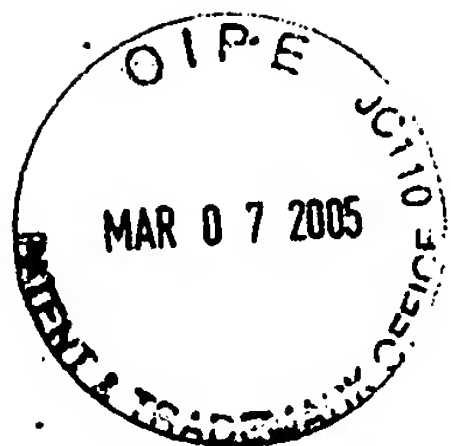


Fig. 2C

1486 AAC TCA CCC TTC CTC TCC TCA ATA GGC ATA TGT ACT TGA AAA AAA  
TTG AGT GGG AAG GAG AGG AGT TAT CCG TAT ACA TGA ACT TTT TTT

1531 CGG CTC AAC TCC CTT ATC ACA CGG GTC CCA TCC TCA AAA CAG AAA  
GCC GAG TTG AGG GAA TAG TGT GCC CAG GGT AGG AGT TTT GTC TTT

1576 TCA AAA TGA GAC TAG TTC TCT CAT CAA GTC GGG AGA AAA GGC AGC  
AGT TTT ACT CTG ATC AAG AGA GTA GTT CAG CCC TCT TTT CCG TCG

1621 ATG AAC GTA GCA CAT GGT CTA GCA TCT AAG TAT TGG GAG ACA GAG  
TAC TTG CAT CGT GTA CCA GAT CGT AGA TTC ATA ACC CTC TGT CTC

1666 AAT CTT GAG TTC AAA ACC AAC CTG AAG ACC TTC TTT CTT TTT TTT  
TTA GAA CTC AAG TTT TGG TTG GAC TTC TGG AAG AAA GAA AAA AAA

1711 TTT TTT TTT TTT TTT TTT TGA AGA CCT TCT TTC TAA AAA CAA ACA  
AAA AAA AAA AAA AAA AAA ACT TCT GGA AGA AAG ATT TTT GTT TGT

1756 AAC AAA CAA ACA AAC AAG AAA ATT CTT CCC TGG TTT GAC TTT TTT  
TTG TTT GTT TGT TTG TTC TTT TAA GAA GGG ACC AAA CTG AAA AAA

1801 CTT CTT CCT TTT TGT AAT TAC CCA CCT CTG GAA ATA GGG TTT GTA  
GAA GAA GGA AAA ACA TTA ATG GGT GGA GAC CTT TAT CCC AAA CAT

1846 GCC TAA TAG CCT ACA TGT ATA CAA GGC AAT ACA AGA AAA GAG CCA  
CGG ATT ATC GGA TGT ACA TAT GTT CCG TTA TGT TCT TTT CTG GGT

1891 ACA GGC AAG ACC CCC CCC CCC AAG TCC CTT CCC CAG GAT TTG GCA  
TGT CCG TTC TGG GGG GGG GGG TTC AGG GAA GGG GTC CTA AAC CGT

1936 ATC AGT CCT CAC TCT CTA CTC CCA GAG ATA CAA CTA GCT CCC TCT  
TAG TCA GGA GTG AGA GAT GAG GGT CTC TAT GTT GAT CGA GGG AGA

1981 CAC CCT TCC CTC CCT TCC TCC CTC CTT CCC TCC TTC CCT CCT TCC  
GTG GGA AGG GAG GGA AGG AGG GAG GAA GGG AGG AAG GGA GGA AGG

2026 CTC CTT CCC TCC CTC CCT CCT CCC TCC TTC CCT CCC TCC CTC AAC  
GAG GAA GGG AGG GAG GGA GGA GGG AGG AAG GGA GGG AGG GAG TTG

2071 TAT CTC TTT TAG TGA CAA CCC CAA GCC CCT TCT TAA AAT GTC AAG  
ATA GAG AAA ATC ACT GTT GGG GTT CGG GGA AGA ATT TTA CAG TTC

2116 TTC AGC CTA GAG ATG CTG CTC ACT TGG TAG AGT ATG TGC TTG CCT  
AAG TCG GAT CTC TAC GAC GAG TGA ACC ATC TCA TAC ACG AAC GGA

2161 AGA ATG CAC GAA GCC CTG AAT TCC ATC CCC AGT ATC AAA TAA ACC  
TCT TAC GTG CTT CGG GAC TTA AGG TAG GGG TCA TAG TTT ATT TGG

2206 AAC CAC GGC GGT ACA TGC TTG TAA TTC CAG CAC TCA GGA GGT GGC  
TTG GTG CCG CCA TGT ACG AAC ATT AAG GTC GTG AGT CCT CCA CCG



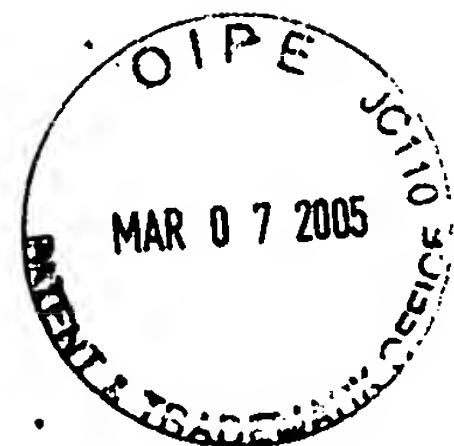


Fig. 2D

2251 CAT AGG AAA ATC AAG AGT TCA AAG GTA TTC TTG TGT TAT ACA GTG  
GTA TCC TTT TAG TTC TCA AGT TTC CAT AAG AAC ACA ATA TGT CAC

2296 AGC TGG AGG GCA ACC TGA GCT ACA TCA TAC TCT GTC ATT AAA AAA  
TCG ACC TCC CGT TGG ACT CGA TGT AGT ATG AGA CAG TAA TTT TTT

2341 AAA AAA TCC AAT TCA TAT TCT TCC ATA CCC TGG TTG CAT TTC TCT  
TTT TTT AGG TTA AGT ATA AGA AGG TAT GGG ACC AAC GTA AAG AGA

2386 GTC CTC AAT TAA TCT TCT CCT AAA CTC CTG TCA TTA GAT GTC TCG  
CAG GAG TTA ATT AGA AGA GGA TTT GAG GAC AGT AAT CTA CAG AGC

2431 CTT CAG ATT TTG CTT GTT TGA TAA GCT TCC ACT TGC CGG TCA GGA  
GAA GTC TAA AAC GAA CAA ACT ATT CGA AGG TGA ACG GCC AGT CCT

2476 ATC TGG GTA CCC TTC TAA CTG TTG GAG AAC AGT GCC TAG AAT GGA  
TAG ACC CAT GGG AAG ATT GAC AAC CTC TTG TCA CGG ATC TTA CCT

2521 GCC ACT GGC CTG GAG GTG GAC ATT AAC AAT CCA CTG AAG GAA TGT  
CGG TGA CCG GAC CTC CAC CTG TAA TTG TTA GGT GAC TTC CTT ACA

2566 GTG CAG GGA ATA ACT GAA CGA ATG AAT GAG CAA CAG AAG TTT CTA  
CAC GTC CCT TAT TGA CTT GCT TAC TTA CTC GTT GTC TTC AAA GAT

2611 GGT TTT ATC AAG GCC AAA GAG GTT GCA AGG GGG AAC TAA AGT ATA  
CCA AAA TAG TTC CGG TTT CTC CAA CGT TCC CCC TTG ATT TCA TAT

2656 GCG CTG GTC TCA GAT GTG ACT CAA GTC TCT GTC ACC TGC CTA ACG  
GCG GAC CAG AGT CTA CAC TGA GTT CAG AGA CAG TGG ACG GAT TGC

2701 CAG GGA TTT TCT TCC TTT TGT AGA AGC CAG TTG TGT AGA AGT TGC  
GTC CCT AAA AGA AGG AAA ACA TCT TCG GTC AAC ACA TCT TCA ACG

2746 ACA TCT CTC TGA ACC CAT GGC TTG ACT CCA GGA GCC CCC ATT AGA  
TGT AGA GAG ACT TGG GTA CCG AAC TGA GGT CCT CGG GGG TAA TCT

2791 GGT AAG CAT CCC CAC CCT ACC TTT TAA CTG AAG CGT GAA CAG GGG  
CCA TTC GTA GGG GTG GGA TGG AAA ATT GAC TTC GCA CTT GTC CCC

2836 GAA AAA ATA ATC CCA GCG GGC CCC CTG GGG TGT ATG AAC CGG GAT  
CTT TTT TAT TAG GGT CGC CCG GGG GAC CCC ACA TAC TTG GCC CTA

2881 GCC CAC ACC CGG ATC CCC TGC TCT GCT CCC CGC CCC ATC CCC GCA  
CGG GTG TGG GCC TAG GGG ACG AGA CGA GGG GCG GGG TAG GGG CGT

2926 GAG GGA GCG GTG CCG GGC GCG GCA GGT CTC CAA GCC GAC TAG GCT  
CTC CCT CGC CAC GGC CCG CGC CGT CCA GAG GTT CGG CTG ATC CGA

2971 GGC GCT GGC GTC GGG GCT GCG CTC CTT GGC TGG ACC CGC ATT GCC  
CCG CGA CCG CAG CCC CGA CGC GAG GAA CCG ACC TGG GCG TAA CGG

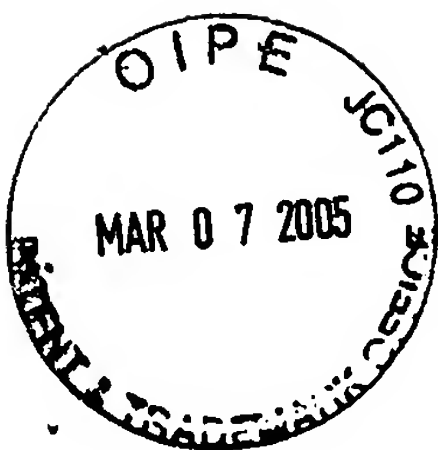


Fig. 2E

3016 CCC TAG TGC CGC ACA GAG TCA GGG CGC CCG GGC TTC CCC GCC TGA  
GGG ATC ACG GCG TGT CTC AGT CCC GCG GGC CCG AAG GGG CGG ACT

3061 TGT CAC CGC CGT GCA GTC AGC CCA GAG GCG GCT CAT TGA AAG CAG  
ACA GTG GCG GCA CGT CAG TCG GGT CTC CGC CGA GTA ACT TTC GTC

3106 ACC CGC CGC GGG CCG GGC ACA GCC GGG CAC CCC CGG CCC GGC GCC  
TGG GCG GCG CCC GGC CCG TGT CGG CCC GTG GGG GCC GGG CCG CGG

3151 GCG TCC TCC CCG CGC TCC CGC GCC AGC CCG GCC AGG CGC GCC TGA  
GCG AGG AGG GGC GCG AGG GCG CGG TCG GGC CGG TCC GCG CGG ACT

3196 CGT GGA CCA TTA AAC TTG GAG CTC CCG CCT CGT CCC CTC TCT CCT  
GCA CCT GGT AAT TTG AAC CTC GAC GGC GGA GCA GGG GAG AGA GGA  
Seq. # 2 sense  
→

3241 CCT CCT CCC TCT GAC AGG CGA GCG AGC CGC TGG GTG CAG GCA GGC  
GGA GGA GGG AGA CTG TCC GCT CGC TCG GCG ACC CAC GTC CTT CCG

3286 GAG GTG CTG CCG GGC TAG GCT GCC CGG GGG AGA TGA CTT CTC GCC  
CTG CAC GAC GGC CCG ATC CGA CGG GCC CCC TCT ACT GAA GAG CGG  
Promoter Seq. # 1 sense  
→

3336 AGG AGG ACG CCT CTG GAA AGA AGA CCA CGG AGG GAG CAA AGT TTC  
TCC TCC TGC GGA GAC CTT TCT TCT GGT GCC TCC CTC GTT TCA AAG

3376 AGG GCA GCT GAG GAG CTT TGG TCG CAG CCC TTC CGA GCC CAA TCT  
TCC CGT CGA CTC CTC GAA ACC AGC GTC GGG AAG GCT CGG GTT AGA  
PVU II

3421 CCT CCC TGG CTA TGG AGG GCG GAC TTT AAA ATG  
GGA GGG ACC GAT ACC TCC CGC CTG AAA TTT TAC